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25X1A2g

COUNTRY: Sweden/Switzerland

CIA [REDACTED]

SUBJECT: Semi-Conductor Research/Transistor Development
25X1A6a

DATE 30 October 1953

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PLACE ACQUIRED
(BY SOURCE)

Supplement to: [REDACTED]

DATE ACQUIRED
(BY SOURCE)

Responsive to [REDACTED]

DATE (OF INFO) Sep - Oct 52

ATIC - TIC-438-25X1A2g

DAS 1952

ORR 1308

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SOURCE OR CLARIFYING STATEMENT:

1. Q. What further information has been obtained regarding the process involved in melting and casting the silicon and then using the cast material as a transistor?
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- A. I have no information other than that reported in [REDACTED] I still feel that the process has not gone beyond the laboratory stage.
2. Q. What materials are being used for semi-conductor purposes by the Electro-Thermal Research Institute?
- A. I questioned Dr Lundquist about this but he did not give me a specific answer.
3. Q. What phase systems and transition elements are being investigated by students attending the Eidgenossische Technische Hochschule (ETH)?
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- A. As reported in [REDACTED] I did not see Dr Busch but talked to one of his graduate students. According to this student the plan is eventually to investigate all of the transition elements. The only one mentioned was grey tin.
4. Q. What is the original source for the almost pure silicon-carbide that Dr Busch is using in his experimentation?
- A. I do not remember. It was mentioned in one of Dr. Busch's articles in Helveta Physica Acta.
5. Q. What are the detailed procedural methods employed by Dr Busch in his laboratory for detecting the properties of semi-conductors by photoconductive means?

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5. A. As I did not talk to Dr. Busch I could not answer this question.
6. Q. What specifically is inferred by the statement "There is apparently a close parallelism between the work being done in the USSR and at ETH in intermetallic compounds"?
- A. As reported, it was a deduction on my part. What I saw at ETH and the summary of USSR papers given by Dr. Billig seemed to indicate a parallelism in the work of ETH and USSR scientists.

- end -